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Concluded.

transferring the data to a data collector/router comprising a wireless transmitter configured to transmit data over a wireless communications network;

transmitting data representing the vehicle's emissions with the wireless transmitter over the wireless communications network and then to a host computer system;

at the host computer system, analyzing the data representing the vehicle's emissions; and

at the host computer system, comparing the analyzed data to at least one predetermined value to characterize the vehicle's emissions.

2. (Once Amended) The method of claim 1, wherein the data are serially transferred through an OBD-II connector or a similar serial interface to the data collector/router.

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4. (Once Amended) The method of claim 3, wherein the sensor generates a signal in response to gas containing at least one of oxygen, oxides of nitrogen, and hydrocarbons.

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~~6~~ 7. (Once Amended) The method of claim 1, wherein the analyzing step further comprises extracting data representative of the vehicle's emissions and storing the data in a computer memory or database.

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~~12~~ 13. (Once Amended) The method of claim 1, further comprising sending an electronic text, data, or voice message to a computer, cellular telephone, or wireless device after the data are analyzed, said message containing information about the analyzed data.

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~~15~~ 14. (Once Amended) The method of claim ~~13~~ 14, wherein the results are displayed on a web page on the World-Wide Web or the Internet.

~~16~~ 15. (Once Amended) The method of claim 1, wherein the method further comprises sending a second set of data from the host computer system over the wireless communications network and then to the data collector/router disposed in the vehicle.

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18. (Once Amended) The method of claim 17, further comprising processing the second set of data in the data collector/router to generate a signal, and sending the signal to at least one microcontroller disposed within the vehicle.

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20 21. (Once Amended) A system for characterizing a vehicle's emissions comprising:
a microprocessor configured to process data generated by at least one sensor disposed in the vehicle to generate data representative of the vehicle's emissions; and
a wireless transmitter in electrical contact with the microprocessor and configured to receive the data representative of the vehicle's emissions and transmit it over a wireless communications network to a host computer system, the host computer system configured to receive the data from the network, analyze the data with an algorithm and compare the analyzed data to one or more predetermined values to characterize the vehicle's emissions.

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22 23 24. (Once Amended) The system of claim 23, wherein the data indicate a concentration of oxygen, oxides of nitrogen, hydrocarbons, or derivatives thereof.

Please add following claims 25-33:

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24 25. A system for characterizing emissions from a plurality of vehicles, each of which includes a wireless device for communicating information about the vehicle to a central location, said system comprising:

a gateway system that receives emission related data from the plurality of wireless devices located in the plurality of vehicles, said emission-related data representative of emissions generated by each of said plurality of vehicles; and

an Internet-based system that communicates with the gateway system to receive the emission-related data from the gateway system, the internet-based system comprising:

a database system that electronically stores the emission-related data from said plurality of vehicles;

an application system that analyzes the emission-related data to characterize the emissions of each of the plurality of vehicles; and

an interface system that enables users to remotely access over the Internet the analyzed data for the plurality of vehicles.--

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~~25~~. The system of claim ²⁴~~25~~, wherein the interface system is configured to generate a plurality of web pages, each of which displays data for a corresponding one of the plurality of vehicles.--

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~~26~~. The system of claim ²⁴~~26~~, wherein the application system is programmed to implement an algorithm that compares the analyzed data to at least one predetermined value to characterize the vehicles' emissions.--

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~~27~~. The system of claim ²⁶~~27~~, wherein the application system is further programmed to implement an algorithm that determines for each of the plurality of vehicles whether it passes or fails an emissions test based on the comparison to the at least one predetermined value.--

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~~28~~. The system of claim ²⁷~~28~~, wherein the interface system is configured to generate a web page that displays information indicating whether a particular one of the plurality of vehicles passes or fails the emissions test.--

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~~29~~. The system of claim ²⁸~~29~~, further comprising a notification system that for each of the plurality of vehicles transmits a notification to a corresponding receiving system that is remote from the gateway and Internet-based systems, said notification reporting whether that vehicle passed or failed the emissions test.--

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~~30~~. The system of claim ²⁹~~30~~, wherein the notification is an electronic mail message.--

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~~31~~. The system of claim ²⁴~~31~~ wherein the emission-related data includes only data that is available from an OBD-type system.--

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Serial No. : 09/776,033
Filed : February 1, 2001
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Attorney's Docket No.: 113751.122 US2

~~32~~ 33. A method for characterizing emissions from a plurality of vehicles, each of which includes a wireless device for communicating information about the vehicle to a central location, said method comprising:

receiving emission-related data from the plurality of wireless devices located in the plurality of vehicles, said emission-related data representative of emissions generated by each of said plurality of vehicles; and

electronically storing in a database the emission-related data received from the plurality of vehicles;

analyzing the emission-related data to characterize the emissions of each of the plurality of vehicles; and

providing users remote access over the Internet to the analyzed data for the plurality of vehicles.--